



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-9 series
 UNIQUE ID NUMBER: 1PW006
 COMBUSTOR: Smoke fix
 ENGINE TYPE: MTF

BYPASS RATIO: 1.0
 PRESSURE RATIO (π_{00}): 15.9
 RATED THRUST (F_{00}) (kN): 64.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	37.6	129.0	53.7	24.0
AS % OF ORIGINAL LIMIT	191.7	109.3	74.8	90.0
AS % OF CAEP/2 LIMIT (NO _x)			93.5	
AS % OF CAEP/4 LIMIT (NO _x)			108.3	
AS % OF CAEP/6 LIMIT (NO _x)			116.0	
AS % OF CAEP/8 LIMIT (NO _x)			135.0	

DATA STATUS

x PRE-REGULATION
 - CERTIFICATION
 x REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	1.040	0.47	1.24	17.92	
CLIMB OUT	85	2.2	0.846	0.47	1.66	14.21	
APPROACH	30	4.0	0.298	1.73	9.43	5.64	
IDLE	7	26.0	0.132	10.00	34.50	2.90	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			433	2256	8018	3370	-
NUMBER OF ENGINES				13	13	14	14
NUMBER OF TESTS				14	14	14	14
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				35.0	124.3	52.3	23.0
SIGMA (D _p /F ₀₀ in g/kN, or SN)				8.4	11.2	5.7	2.0
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	100-102
TEMPERATURE (K)	262-300
ABS HUMIDITY (kg/kg)	0.0005-0.0123

FUEL

SPEC	Jet A
H/C	1.89
AROM (%)	

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: P&WA
 TEST LOCATION: East Hartford, CT
 TEST DATES: 01/04/1976-01/03/1977

REMARKS

- Smoke fix combustor in production prior to 1/1/84.
- Applicable to JT8D-9, -9A.

Compliance with Fuel Venting requirements: -

('x' if complies, 'PR' if pre-regulation, '-' if information is not available)